

REMARKS

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Claims 1-22 and 24-29 and are now present in this application. Claims 1, 25 and 29 are independent.

Amendments have been made to claims 1-22 and 24-28, claim 23 has been canceled and claim 29 has been added. Reconsideration of this application, as amended, is respectfully requested.

Priority Under 35 U.S.C. § 119

Applicants thank the Examiner for acknowledging Applicants' claim for foreign priority under 35 U.S.C. § 119, and receipt of the certified priority document.

Information Disclosure Citation

Applicants thank the Examiner for considering the references supplied with the Information Disclosure Statement filed November 1, 2004, and for providing Applicants with an initialed copy of the PTO-1449 form filed therewith.

The Examiner has stated that the Information Disclosure Statement filed July 14, 2004 does not comply with 37 CFR 1.98(a)(2) because copies of the references have not been provided. However, those references were cited in the International Search Report and should have been forwarded to the Examiner by the International Bureau for this National Stage application, in accordance with USPTO/PCT requirements. However, as a courtesy to the Examiner, Applicants hereby submit a copy of the references and a new PTO-SB08 for the Examiner's consideration.

Drawings

Since no objection has been received, Applicants assume that the drawings are acceptable and that no further action is necessary. Confirmation thereof in the next Office Action is respectfully requested.

Claim Amendments

Applicants have amended the claims in order to correct minor typographical errors, remove reference numerals, and to place the claims in better form. The claim amendments are not being made in response to any statutory requirement for patentability, and have not been narrowed in scope. Instead, the claims have been amended merely to recite the subject matter therein more clearly.

Rejection Under 35 U.S.C. § 112, 2nd Paragraph

Claims 1-28 stand rejected under 35 U.S.C. § 112, 2nd Paragraph. This rejection is respectfully traversed.

The Examiner has set forth certain instances in claims 1, 18, 25 and 26 wherein the claim language lacks antecedent basis or is not clearly understood.

In order to overcome this rejection, Applicants have amended claims 1, 18, 25 and 26 to correct each of the deficiencies specifically pointed out by the Examiner. Applicants respectfully submit that the claims, as amended, particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Rejections under 35 U.S.C. §103

Claims 1-3, 5, 7-17, 21 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over SU '009 in view of SU '713. Further, claims 1-3, 5, 7-16, 21 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over SU '800 in view of SU '009. These rejections are respectfully traversed.

Complete discussions of the Examiner's rejections are set forth in the Office Action, and are not being repeated here.

During patent examination the PTO bears the initial burden of presenting a *prima facie* case of unpatentability. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444(Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788(Fed. Cir. 1984). This burden

can be satisfied when the PTO presents evidence, by means of some teaching, suggestion or inference either in the applied prior art or generally available knowledge, that would have appeared to have suggested the claimed subject matter to a person of ordinary skill in the art or would have motivated a person of ordinary skill in the art to combine the applied references in the proposed manner to arrive at the claimed invention. See Carella v. Starlight Archery Pro Line Co., 804 F.2d 135, 140, 231 USPQ 644, 647 (Fed. Cir. 1986); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); In re Rinehart, 531 F.2d 1048, 1051-1052, 189 USPQ 143, 147 (CCPA 1976).

If the PTO fails to meet this burden, then the applicants is entitled to the patent. However, when a *prima facie* case is made, the burden shifts to the applicant to come forward with evidence and/or argument supporting patentability. Patentability *vel non* is then determined on the entirety of the record, by a preponderance of evidence and weight of argument, In re Ochiai, cited above.

A prior art reference anticipates the subject matter of a claim when that reference discloses every feature of the claimed invention, either explicitly or inherently. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997) and Hazani v. Int'l Trade Comm'n, 126 F.3d 1473, 1477, 44 USPQ2d 1358, 1361 (Fed. Cir. 1997). While, of course, it is possible that it is inherent in the operation of the prior art device that a particular element operates as theorized by the examiner, inherency may not be established by probabilities or possibilities. In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) and In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

What is alleged to be inherent must necessarily occur. The mere fact that something *may* result from a given set of circumstances is not sufficient. In re Oelrich, 212 USPQ 323, 326 (CCPA 1991). "Inherent anticipation requires that the missing descriptive material is 'necessarily present,' not merely probably or possibly present, in the prior art." Trintec Indus., Inc. v. Top-U.S.A. Corp., 295 F.3d 1292, 1295, 63 USPQ2d 1597, 1599 (Fed. Cir. 2002) (quoting In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)).

Because the rejection is based on 35 U.S.C. § 103, what is in issue in such a rejection is "the invention as a whole", not just a few features of the claimed invention. Under 35 U.S.C. § 103, "[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains." The determination under section 103 is whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made. See In re O'Farrell, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988). In determining obviousness, the Examiner must explain what the differences between the claimed invention and the prior art are and provide objective factual evidence to support a conclusion that it would be obvious to one of ordinary skill in the art to achieve the claimed invention, which includes those missing features.

In the second place, in rejecting claims under 35 U.S.C. § 103, it is incumbent on the Examiner to establish a factual basis to support the legal conclusion of obviousness. See, In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one of ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. F-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. Note, In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d

1780, 1783-84 (Fed. Cir. 1992). To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be suggested or taught by the prior art. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1970). All words in a claim must be considered in judging the patentability of that claim against the prior art. In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

A showing of a suggestion, teaching, or motivation to combine the prior art references is an “essential evidentiary component of an obviousness holding.” C.R. Bard, Inc. v. M3 Sys. Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998). This showing must be clear and particular, and broad conclusory statements about the teaching of multiple references, standing alone, are not “evidence.” See In re Dembiczak, 175 F.3d 994 at 1000, 50 USPQ2d 1614 at 1617 (Fed. Cir. 1999).

Moreover, it is well settled that the Office Action must provide objective evidence of the basis used in a prior art rejection. A factual inquiry whether to modify a reference must be based on objective evidence of record, not merely conclusory statements of the Examiner. See, In re Lee, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002).

While not conceding the appropriateness of the Examiner’s rejection, but merely to advance prosecution of the instant application, Applicants respectfully submit that claim 1 has been amended to recite a combination of elements in a trawling vessel including a ceiling covering generally all of a lock chamber, in which a portion of the ceiling of the lock chamber is arranged to extend below the vessel’s water line, for the prevention of free surface wave formation in the lock chamber, a combination which is not disclosed or made obvious by the applied references for the reasons set forth below.

Applicants respectfully disagree with the Examiner’s contention that the chamber 5 indicated in SU '009 may be considered to be a lock chamber in the same manner as the lock chamber claimed in the present application. The chamber indicated in SU '009 has as its sole purpose to allow the trawl to be hauled along the length of the ship and on dry deck, by means of a bow winch. Applicants would consider the chamber 5 to be more like a tunnel through which one hauls the net, rather than being a marine lock chamber.

Applicants also respectfully disagree with the Examiner's contention that there are front and aft channels running through the ceiling. Although there may be a front channel through which the bow winch hauls the trawl, the aft channel as defined by the Examiner is no more than the opening of the tunnel from the deck. The catch itself does not pass through this channel, nor this opening, as is supported by the final section of the cited patent:

When there is a full catch in the trawl, the latter is hauled out of the water using the winch 10 via the stern slipway 3 onto the trawler deck 4 and dragged along the slipway 8 onto the tank deck 7. The part of the trawl 11 with the catch which remains in the water is lifted by a crane 9, and the fish is poured out onto the trawler deck 4.

Furthermore, the catch is first hauled onto the deck via the stern slipway 3, and thus does not enter into a chamber, but passes directly onto the deck. In the present invention, one of the major advantages is not using a slipway for the hauling of the trawl sack with the catch. Applicants disagree with the definition of the tunnel 5 of the cited patent as being a lock chamber, as it is not a lock chamber in the water, having no lock, not being a chamber, and not being in contact with water.

Applicants agree with the Examiner that the tunnel 5 of the cited SU '009 does not show a storage sump, or the tunnel having a substantial volume below the design water line of the vessel.

Applicants contend that SU '009 does not solve the problems that are solved by the present invention. As the catch is released directly onto the deck, one must use a large portion of the aft deck for the treatment of fish, after which one must clean the deck due to product hygiene requirements particularly under warm conditions. None of these problems are present in the present invention, which additionally provides for a much larger free working space as the aft deck is unburdened by the trawl and catch.

Regarding the Examiner's reliance on SU '713 as a secondary reference, Applicants have amended claim 1 to recite that "a portion of the ceiling of the lock chamber ceiling is arranged to extend below the vessel's water line, for the prevention of free surface wave formation in the lock chamber." Given a free water surface of any essential size in the lock chamber, undesired

surface wave formation will occur due to pitching and rolling of the vessel in the sea. In particular, longitudinal surface wave formation, so-called "sloshing" in the lock chamber due to pitching, is undesirable, and such pitch-induced sloshing may be detrimental to the hauling and unloading operation of the trawl sack and the catch.

Applicants further contend that because SU '009 does not show a lock chamber with a ceiling, and SU'713 does not show a lock chamber having a ceiling, the ceiling above the chamber represents a major inventive step with respect to these patent documents. Thus, it would not have been obvious to one of ordinary skill in the art to modify the vessel of SU '009, which does not provide a lock chamber with a ceiling, and does not provide an aft tunnel for the hauling of the trawl, in light of the disclosure of SU '713, which does not provide a lock chamber ceiling, and does not provide for any means to prevent sloshing in the chamber, to provide the vessel of the present invention having all of the above.

Regarding the rejection based on SU '800, the reference appears to show a vessel arranged for towing and hauling a trawl net, where the trawl is hauled through a sluiceway in the stern, and with a lock chamber that has a substantial portion of its volume below the design water line of the vessel. Applicants agree with the Examiner that SU '800 does not show a ceiling over the lock chamber or an aft channel extending through the ceiling.

However, Applicants respectfully disagree with the Examiner's contention that a trunk canal leads up from the chamber to allow the net to be hauled up on deck in a discharged state. Instead, the trunk channel of SU '800 is in fact a broad longitudinally arranged slit arranged along the entire extension of the trawl deck extending from the trawl winch to the stern of the boat. This is clearly illustrated in Figs. 2, 3 and 4 of SU '800.

Furthermore, as discussed above, Applicants disagree with the Examiner in the understanding of SU '009, and would thus contend that it would not be obvious for a person of ordinary skill in the art to modify SU '800 along the lines of SU '009 "such that its lock chamber was covered with a ceiling, and provided with an aft channel - in addition to the forward channel - extending through the ceiling". As the cited SU '009 does neither comprise a lock chamber nor comprise an aft channel, a person of ordinary skill in the art would need to perform a major inventive step to arrive at the present invention by modifying SU '800 along the lines of SU '009.

Applicants respectfully submit that none of the above cited references describe a vessel in which a lock chamber has a ceiling arranged above the chamber for increasing the useful deck area, and none of the above cited references show a lock chamber ceiling extending below the vessels water line so as for preventing sloshing in the lock chamber as defined by amended claim 1.

Additionally, there is no mention in any of the above cited references of a trunk canal through the ceiling of a lock chamber, solely in the cited SU '009 of an entrance to a tunnel through which the trawl is hauled entirely above the waterline by means of a bow winch. Thus, although we agree with the Examiner regarding an aft channel in the ceiling as being useful to enable a simple, efficient and rapid discharge of fish in the chamber, Applicants cannot see that this is disclosed in any of the above cited references.

Applicants respectfully submit that the combination of elements as set forth in independent claim 1 is not disclosed or made obvious by the prior art of record for the reasons explained above. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

With regard to dependent claims 2-22 and 24, Applicants submit that these claims depend, either directly or indirectly, from independent claim 1 which is allowable for the reasons set forth above, and therefore claims 2-22 and 24 are allowable based on their dependence from claim 1. Reconsideration and allowance thereof are respectfully requested.

Allowable Subject Matter

The Examiner states that claims 4, 6, 18-20, 22 and 24 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. § 112, 2nd Paragraph.

Applicants thank the Examiner for the early indication of allowable subject matter in this application. Claim 1 has been amended as set forth above in order to overcome the rejection under 35 U.S.C. § 112, 2nd Paragraph. However, claims 4, 6, 8-20, 22 and 24 have not been rewritten in independent form at this time, since it is believed that independent claim 1 from which these claims depend is allowable.

New Claim

Independent claim 29 has been added for the Examiner's consideration.

Independent claim 29 recites a combination of elements in a method for trawl catching of marine bio-resources including hauling the entire trawl net through the lock chamber and winding it continuously onto the drum above the forward trunk channel; unzipping horizontally arranged zips of the trawl sack when the trawl sack, with the catch, arrives to the lock chamber; and permitting the catch to fall out and drop through a grid to an underlying chamber. Applicants respectfully submits that this combination of elements as set forth in independent claim 29 is not disclosed or made obvious by the prior art of record.

Consideration and allowance of claim 29 is respectfully requested.

Additional Cited References

Since the remaining references cited by the Examiner have not been utilized to reject the claims, but have merely been cited to show the state of the art, no comment need be made with respect thereto.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone James T. Eller, Jr., Registration No. 39,538, at (703) 205-8000, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

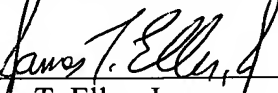
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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Dated: March 15, 2006

Respectfully submitted,

By  _____

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Attachments: References cited July 14, 2004
Form PTO SB-08